

# SunBeam Institute of Information Technology

## Java Assignment 8

Q1) Create Java application for fixed stack & growable stack based on Stack interface, for storing emp details.

1.1 Create Employee class -- id,name,salary, constructor,toString

1.2 Stack interface -- push & pop functionality for Emp refs. & declare STACK\_SIZE as a constant.

1.3 Create implementation class of Stack i/f -- FixedStack (array based)

1.4 Create another implementation class of Stack i/f-- GrowableStack (array based)

1.5 Create Tester class (Hint : use dynamic method dispatch using interfaces)

Display Menu

Note : Must use 1 switch-case only. You won't need any complex nested control structure

Once user selects either fixed or growable stack , user shouldn't be allowed to change the selection of the stack.

(Hint : null checking)

1 -- Choose Fixed Stack

2 -- Choose Growable Stack

Accept following options only after initial selection.(Hint : null checking)

3 -- Push data

I/P : Accept emp details & store these details in the earlier chosen stack or give error mesg : NO stack chosen !!!

4 --- Pop data & display the same (from the earlier chosen stack or give error mesg : NO stack chosen !!!)

No inputs are required : pop emp details from the top of the stack

5 -- Exit

Q2) Write a Java program to create a new array list, add some colors (string) and print out the collection as sorted list.

Q3) Write a Java program to replace the second element of a ArrayList with the specified element.